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REPORT

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SUPPLEMENT TO
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THIS IS UNEVALUATED INFORMATION

USSR HAS VALUABLE SALT DEPOSITS;
SALT MINING IS MECHANIZED

Another unique salt deposit in the USSR is the Kara-Bogaz-Gol Bay in the Caspian Sea. The main type of salt found here is Glauber salt, also called mirabilite, which turns into crystals in the winter and dissolves in the water at the beginning of the warm season. The mirabilite crystals, which are thrown out on the shore by the waves, contain 10 molecules of water to one molecule of sulfate. In the summer the water evaporates from the crystals and they are transformed into anhydrous sodium sulfate, losing their crystal form in the process. To obtain sodium sulfate industrially from common salt and sulfuric acid complicated and expensive machinery is necessary. In Kara-Bogaz-Gol, sulfate is produced by a natural process.

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In addition to mirabilite, another mineral, astrakanite, is obtained from the salt water of Kara-Bogaz-Gol. The chemical composition of this mineral is sodium magnesium sulfate. Astrakanite differs from mirabilite only in its crystalline structure and its physical properties. This mineral received its name because of its widespread occurrence in the lakes of Astrakhan Oblast. Mirabilite, transformed into sodium sulfate, is a valuable raw material for the production of soda, metallic sodium sodium silicate, and a number of other chemical products. The chief consumer of sulfate is the glass industry.(1)

Most of the salt used for food in the USSR is obtained from salt lakes.(3) One of the largest of these is Lake Baskunchak in Astrakhan Oblast. The salt-mining season on this lake began on 8 April. Salt pumps are used for extracting the salt.(4) Four large machines for breaking up the hard salt layers are in operation. Railroad tracks have been built to the salt-mining area. The salt is immediately loaded into railroad cars and shipped to the port of Vladimirovka on the Volga River. The first few thousand tons of salt have been extracted in 10 days during April and are being loaded on river barges.(5)

In Artemovsk, Ukrainian SSR, salt is mined from an underground mine. Salt deposits are found here at depths of 80, 100, 200, or more meters. As in coal mines, great changes have taken place in salt mining in recent years. Cutting machines are used for cutting drifts. The salt is loaded by S-153 machines and scrapers. Electric locomotives run underground and deliver the salt to elevator cars. Artemovsk salt is shipped to every part of the USSR.(3)

The Solotvino salt mines in the Transcarpathian Oblast have existed for over 100 years. However, only under Soviet rule were the mines equipped with modern machinery to become important enterprises. Solotvino salt miners have already exceeded the Five-Year Plan.(6)

The Sol'-Iletsk Salt Mine, Chkalov Oblast, is one of the largest salt-mining enterprises in the country. The salt from this mine is of high quality and has a high chlorine content. Salt mining has been completely mechanized.(7)

The Chon-Tuz Salt Mine of the "Cholpon" Industrial Artel, Kirgiz SSR, fulfilled the 1949 plan by 7 November. Improved techniques and labor mechanization made it possible to increase labor productivity 62 percent over 1948.(8)

SOURCES

1. Znaniye - Sila, No 4, Apr 50
2. Pionerskaya Pravda, No 33, 25 Apr 50
3. Komsomol'skaya Pravda, No 93, 19 Apr 50
4. Izvestiya, No 85, 9 Apr 50
5. Pravda, No 108, 18 Apr 50
6. Pravda Ukrainy, No 271, 18 Nov 49
7. Krasnaya Zvezda, No 260, 3 Nov 49
8. Sovetskaya Kirgiziya, No 248, 20 Dec 49

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